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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/054,436	01/18/2002	George R. Walgrove III	H10192/DPS	5449

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PATENT LEGAL STAFF
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EXAMINER

MILIA, MARK R

ART UNIT	PAPER NUMBER
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2625

DATE MAILED: 10/16/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 10/054,436	Applicant(s) WALGROVE ET AL.	
	Examiner Mark R. Milia	Art Unit 2625	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE ____ MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 27 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-30 is/are pending in the application.
- 4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1-30 is/are rejected.
- 7) ☐ Claim(s) ____ is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. ____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____. |

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/27/06 has been entered. Currently, claims 1-30 are pending.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1, 6, 13, 16, 18-22, 24, 29, and 30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pitts (US 6345168) in view of U.S. Patent No. 5897238 to Hockey et al.

Regarding claims 1 and 20, Pitts discloses a printing apparatus having a detachable charging system, comprising: a processor (see Fig. 1 "30"), and a detachable charger

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operatively connected to said processor (see Fig. 1 "16", column 3 lines 1-3 and 10-12, and column 4 lines 29-35), wherein a programmed signal from said computer enables or disables said detack charger in response to a sheet weight of a sheet of paper fed into said printing apparatus (see column 4 lines 29-35 and 48-65, reference shows that a DC bias, which controls the detack charging system, can be varied depending on the weight of a sheet of paper by a control system, which is analogous to the claim limitation).

Pitts does not disclose expressly turning the power to the charger on and off.

Hockey discloses turning the power to the charger on and off (see column 5 lines 3-4, column 5 line 60-column 6 line 20, and column 6 line 47-column 7 line 20).

Regarding claim 6, Pitts discloses a printing machine having a detack charging system, comprising: a computer (see Fig. 1 "30", a computer by definition is anything that can compute and therefore the control system of the reference is a computer as it controls the transfer and detack corotrons), and a detack charger operatively connected to said computer (see Fig. 1 "16", column 3 lines 1-3 and 10-12, and column 4 lines 29-35), wherein a programmed signal from said computer enables or disables said detack charger in response to an attribute of a sheet of paper fed into said printing machine (see column 4 lines 29-35 and 48-65, reference shows that a DC bias, which controls the detack charging system, can be varied depending on the weight of a sheet of paper by a control system, which is analogous to the claim limitation).

Pitts does not disclose expressly turning the power to the charger on and off.

Hockey discloses turning the power to the charger on and off (see column 5 lines 3-4, column 5 line 60-column 6 line 20, and column 6 line 47-column 7 line 20).

Regarding claim 13, Pitts discloses a method of detach charging in an image-forming machine, comprising: receiving a sheet a paper from a feeder (see Fig. 1 "12" and column 2 lines 55-58), said sheet of paper having a sheet weight (see column 4 lines 48-55, it is inherent that every sheet of paper has an associated weight), configuring an interface to receive a sheet weight limit (see column 4 lines 37-65, reference shows a user interface "32" that can be used to input paper weights related to a plurality of paper supply trays), generating an enable signal from a central processing unit (CPU) (see Fig. 1 "30") when said sheet weight is less than or equal to said sheet weight limit and enabling a detach charger (see column 4 lines 29-65, reference states that lighter papers benefit from the variation in DC bias, which is enabling of a detach charger, reference also states that a user can input the weights of different stocks in different paper supplies and when the sheet is fed to the system the weight would be determined and mapped to an initial bias voltage which would in turn affect the behavior of the bias voltage during transfer dependent on the weight of the paper), and generating a disable signal from said CPU when said sheet weight is greater than said sheet weight limit and disabling said detach charger (see column 4 lines 29-65, reference states that heavier paper do not require a variation in DC bias, which is a disabling of a detach charger).

Pitts does not disclose expressly turning the power to the charger on and off.

Hockey discloses turning the power to the charger on and off (see column 5 lines 3-4, column 5 line 60-column 6 line 20, and column 6 line 47-column 7 line 20).

Regarding claim 29, Pitts discloses a method of detack charging in an image-forming machine, comprising: receiving a receiver sheet from a feeder (see Fig. 1 "12" and column 2 lines 55-58), said receiver sheet having a sheet weight (see column 4 lines 48-55, it is inherent that every sheet of paper has an associated weight), configuring an interface to receive a sheet weight limit (see column 4 lines 37-65, reference shows a user interface "32" that can be used to input paper weights related to a plurality of paper supply trays), and controlling said detack charger in response to a programmed signal from a central processing unit (CPU) based on said sheet weight limit by enabling and disabling the charger (see column 4 lines 29-35 and 48-65, reference shows that a DC bias, which controls the detack charging system, can be varied depending on the weight of a sheet of paper by a control system, which is analogous to the claim limitation).

Pitts does not disclose expressly turning the power to the charger on and off.

Hockey discloses turning the power to the charger on and off (see column 5 lines 3-4, column 5 line 60-column 6 line 20, and column 6 line 47-column 7 line 20).

Pitts & Hockey are combinable because they are from the same field of endeavor, electrophotographic printing.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the turning on and off of a charger, as described by Hockey, with the system of Pitts.

The suggestion/motivation for doing so would have been to provide a more accurate regulatory charge means.

Therefore, it would have been obvious to combine Hockey with Pitts to obtain the invention as specified in claims 1, 6, 13, 20, and 29.

Regarding claim 16, Pitts further discloses connecting said CPU to said detach charger for receiving an enabled and disable signal (see Fig. 1 and column 4 lines 29-65).

Regarding claim 18, Pitts further discloses configuring said interface to enable said detach charger for a specific sheet of paper in a specific feeder (see Fig. 1 and column 4 lines 29-65).

Regarding claim 19, Pitts further discloses configuring said interface to enable said detach charger for all sheets of paper in a specific feeder (see Fig. 1 and column 4 lines 29-65).

Regarding claim 21, Pitts further discloses wherein said receiver sheet is a sheet of paper (see column 2 lines 55-58 and column 4 lines 48-55).

Regarding claim 22, Pitts further discloses wherein said receiver sheet is a transparency (see column 4 lines 61-65).

Regarding claim 24, Pitts further discloses wherein said programmed signal from said processor, comprises a signal to enable or disable said detach charger (see column 3 line 61-column 4 line 35).

Regarding claim 30, Pitts further discloses generating an enable signal from said CPU when said sheet weight is less than or equal to said sheet weight limit and enabling said detack charger (see column 4 lines 29-65), and generating a disable signal from said CPU when said sheet weight is greater than said sheet weight limit and disabling said detack charger (see column 4 lines 29-65).

4. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pitts in view of Myers (US 6504556) and Hockey.

Regarding claim 11, Pitts discloses a printing machine having a detack charging system, comprising: a feeder to store sheets of paper, said sheets of paper comprising at least one sheet having a sheet weight (see Fig. 1 "12", column 2 lines 55-60, and column 4 lines 48-55, it is inherent that every sheet of paper has an associated weight), an interface having an input device, said interface configured for receiving a sheet weight limit (see Fig. 1 "32" and column 4 lines 29-65), allowing a user to selectively detack said at least one sheet (see column 4 lines 29-65), and a marking engine comprising a central processing unit (CPU) (see Fig. 1 "10" and "30"), a detack charger (see Fig. 1 "16"), said marking engine operatively connected to receive at least one sheet from said feeder (see Fig. 1 and column 2 lines 55-64), said CPU operatively connected to receive said sheet weight limit from said interface, and said detack charger operatively connected to receive a first and a second signal from said CPU (see column 3 line 61-column 4 line 65), where said CPU provides said first signal when said sheet weight of said at least one sheet is less than or equal to said inputted sheet

weight limit, and said detack charger is enabled in response to said first signal (see column 4 lines 29-65, reference states that lighter papers benefit from the variation in DC bias, which is enabling of a detack charger, reference also states that a user can input the weights of different stocks in different paper supplies and when the sheet is fed to the system the weight would be determined and mapped to an initial bias voltage which would in turn affect the behavior of the bias voltage during transfer dependent on the weight of the paper), and where said CPU provides said second signal when said sheet weight of said at least one sheet is greater than said inputted sheet weight limit, and said detack charger is disabled in response to said first signal (see column 4 lines 29-65, reference states that heavier paper do not require a variation in DC bias, which is a disabling of a detack charger).

Pitts does not disclose expressly an interface having a display, said interface further configured to access a menu system having a catalog of sheet attributes of said at least one sheet and turning the power to the charger on and off.

Myers discloses an interface having an input device and a display, said interface configured for receiving a sheet weight limit, said interface further configured to access a menu system having a catalog of sheet attributes of said at least one sheet, (see Figs. 4-6 and column 4 lines 1-60), and a marking engine comprising a central processing unit (CPU), having a memory to store said sheet weight limit and a detack charger, said marking engine operatively connected to receive at least one sheet from said feeder, said CPU operatively connected to receive said sheet weight limit from said interface, and said detack charger operatively connected to receive a first and a second signal

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from said CPU (see Figs. 4-6 and 9, column 2 lines 6-34, column 4 line 39-column 5 line 15, and column 7 lines 40-48 and 53-54).

Hockey discloses turning the power to the charger on and off (see column 5 lines 3-4, column 5 line 60-column 6 line 20, and column 6 line 47-column 7 line 20).

Regarding claim 12, Pitts discloses a method of detach charging in an image-forming machine, comprising receiving a sheet a paper from a feeder (see Fig. 1 and column 2 lines 55-58), said sheet of paper having a sheet weight (see column 4 lines 48-55, it is inherent that every sheet of paper has an associated weight), configuring an interface to receive a sheet weight limit (see column 4 lines 37-65), storing said sheet weight limit in a memory of a central processing unit (CPU) (see column 4 lines 37-65), allowing a user to selectively detach said sheet of paper (see column 4 lines 29-65), connecting said CPU to a detach charger for receiving an enable and disable signal (see Fig. 1 and column 4 lines 29-65), generating said enable signal from said CPU when said sheet weight is less than or equal to said sheet weight limit and enabling said detach charger (see column 4 lines 29-65, reference states that lighter papers benefit from the variation in DC bias, which is enabling of a detach charger, reference also states that a user can input the weights of different stocks in different paper supplies and when the sheet is fed to the system the weight would be determined and mapped to an initial bias voltage which would in turn affect the behavior of the bias voltage during transfer dependent on the weight of the paper), and generating said disable signal from said CPU when said sheet weight is greater than said sheet weight limit and disabling

said detach charger (see column 4 lines 29-65, reference states that heavier paper do not require a variation in DC bias, which is a disabling of a detach charger).

Pitts does not expressly disclose configuring said interface to access a menu system, said menu system having a catalog of sheet attributes of said sheet of paper and turning the power to the charger on and off.

Myers discloses configuring said interface to access a menu system, said menu system having a catalog of sheet attributes of said sheet of paper (see Figs. 4-6 and column 4 lines 1-60).

Hockey discloses turning the power to the charger on and off (see column 5 lines 3-4, column 5 line 60-column 6 line 20, and column 6 line 47-column 7 line 20).

Pitts, Myers, & Hockey are combinable because they are from the same field of endeavor, utilization of paper stock attributes to effectively transfer and detach the paper stock.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the use of a user interface with a display to configure a plurality of paper stock attributes and to store such a configuration in memory to be utilized by the printing system, as described by Myers, and the turning on and off of the charger, as described by Hockey, with the system of Pitts.

The suggestion/motivation for doing so would have been to provide enhanced efficiency through designation of paper stock attributes to increase the speed at which transferring and imaging can take place and to provide a more accurate regulatory charge means.

Therefore, it would have been obvious to combine Myers and Hockey with Pitts to obtain the invention as specified in claims 11 and 12.

5. Claims 2-5, 7-10, 14, 15, 17, and 25-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pitts and Hockey as applied to claims 1, 6, 13, and 20 above, and further in view of Myers.

Regarding claims 2, 7, and 25, Pitts discloses a feeder to store sheets of paper, said sheets of paper comprising at least one sheet having a sheet weight (see Fig. 1 "12" and column 2 lines 55-60, and column 4 lines 48-55), and an interface having an input device (see Fig. 1 "32") and a display, said interface configured for receiving an inputted sheet weight limit (see column 4 lines 29-65), said interface further configured to access a menu system having a catalog of sheet attributes of said at least one sheet, allowing a user to selectively enable said detach charger for said at least one sheet (see column 4 lines 29-65).

Pitts and Hockey do not disclose expressly an interface having a display, said interface further configured to access a menu system having a catalog of sheet attributes of said at least one sheet.

Myers discloses a feeder to store sheets of paper, said sheets of paper comprising at least one sheet having a sheet weight (see Figs. 1, 2, 5, 6, and 9), and an interface having an input device and a display (see Fig. 9), said interface configured for receiving an inputted sheet weight limit, said interface further configured to access a

menu system having a catalog of sheet attributes of said at least one sheet (see Figs. 4-6 and column 4 lines 1-60).

Regarding claim 14, Pitts and Hockey do not disclose expressly storing said sheet weight limit in a memory of said CPU.

Myers discloses storing said sheet weight limit in a memory of said CPU (see Fig. 6 and column 4 lines 1-60).

Regarding claim 15, Pitts and Hockey do not disclose expressly configuring said interface to access a menu system, said menu system having a catalog of sheet attributes of said sheet of paper.

Myers discloses configuring said interface to access a menu system, said menu system having a catalog of sheet attributes of said sheet of paper (see Figs. 4-6 and column 4 lines 1-60).

Pitts, Hockey, & Myers are combinable because they are from the same field of endeavor, utilization of paper stock attributes to effectively transfer and detach the paper stock.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the use of a user interface with a display to configure a plurality of paper stock attributes and to store such a configuration in memory to be utilized by the printing system, as described by Myers, with the system of Pitts and Hockey.

The suggestion/motivation for doing so would have been to provide enhanced efficiency through designation of paper stock attributes to increase the speed at which transferring and imaging can take place.

Therefore, it would have been obvious to combine Myers with Pitts and Hockey to obtain the invention as specified in claims 2, 7, 14, 15, and 25.

Regarding claims 3, 8, and 26, Pitts further discloses a marking engine comprising a central processing unit (CPU) having a memory to store said sheet weight limit (see Fig. 1 "10" and "30"), said marking engine operatively connected to said feeder to receive said at least one sheet from said feeder (see Fig. 1 "12"), said CPU operatively connected to said interface to receive said sheet weight limit from said interface (see Fig. 1 "30" and column 4 lines 29-65), and said detack charger operatively connected to receive said programmed signal from said CPU (see Fig. 1 "16" and column 4 lines 29-65).

Regarding claims 4 and 27, Pitts further discloses wherein said programmed signal enables said detack charger when said sheet weight of said at least one sheet is less than or equal to said sheet weight limit (see column 4 lines 29-65).

Regarding claims 5 and 28, Pitts further discloses wherein said programmed signal disables said detack charger when said sheet weight of said at least one sheet is greater than said sheet weight limit (see column 4 lines 29-65).

Regarding claim 9, Pitts further discloses wherein said programmed signal enables said detach charger when said inputted attribute matches a "detach" attribute of said at least one sheet (see column 4 line 15-column 5 line 15).

Regarding claim 10, Pitts further discloses wherein said programmed signal disables said detach charger when said inputted attribute matches a "no detach" attribute of said at least one sheet (see column 4 line 15-column 5 line 15).

Regarding claim 17, Pitts further discloses configuring said interface to enable said detach charger for a specific sheet of paper (see column 4 lines 29-65).

6. Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pitts and Hockey as applied to claim 20 above, and further in view of U.S. Patent No. 5257097 to Pineau et al. as cited on the Information Disclosure Statement dated 5/22/03.

Pitts discloses wherein sheets to be printed upon can be coated paper of transparencies (see column 4 lines 61-65).

Pitts and Hockey do not disclose expressly wherein said receiver sheet is a tabloid.

Pineau discloses wherein said receiver sheet is a tabloid (see column 2 lines 55-56).

Pitts, Hockey, & Pineau are combinable because they are from the same field of endeavor, printing documents.

At the time of the invention, it would have been obvious to a person of ordinary skill in the art to combine the use of a tabloid as a paper stock option, as describe by Pineau with the system of Pitts and Hockey.

The suggestion/motivation for doing so would have been to provide more options for paper stock, (as mentioned by Pitts in column 4 lines 61-65) and increased efficiency for determining a particular type of stock.

Therefore, it would have been obvious to combine Pineau with Pitts and Hockey to obtain the invention as specified in claim 23.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. To further show the state of the art please refer to the attached Notice of References Cited.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark R. Milia whose telephone number is (571) 272-7408. The examiner can normally be reached M-F 8:00am-4:00pm.


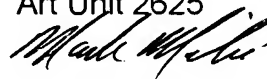
If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Twyler M. Lamb can be reached at (571) 272-7406. The fax number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MRM

Mark R. Milia
Examiner
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TWYLER LAMB
SUPERVISORY PATENT EXAMINER